Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Spectrum Task Force Invites Technical	)	ET Docket No. 10-142
Input on Approaches to Maximize	)	WT Docket No. 04-356
Broadband Use of Fixed/Mobile Spectrum	)	WT Docket No. 07-195
Allocations in the 2 GHz Range	)	
	)	

Reply Comments of United States Cellular Corporation

United States Cellular Corporation ("USCC") hereby files its reply comments in response to the Public Notice released May 20, 2011 ("Public Notice") in which the FCC's Spectrum Task Force invites technical input on approaches to encourage the growth of terrestrial mobile broadband services in the 2 GHz spectrum range for consideration in the record in ET Docket No. 10-142 and WT Docket Nos. 04-356, 07-195.

The FCC's Spectrum Task Force Public Notice invites technical input encompassing the bands co-allocated for Mobile Satellite Service ("MSS") at 2000-2020 MHz and 2180-2200 MHz, as well as bands, or portions of bands, designated for Advanced Wireless Service ("AWS"), including: AWS-2 upper "H" block spectrum at 1995-2000 MHz; AWS-2 paired "J" block spectrum at 2020-2025 MHz and 2175-2180 MHz; and AWS-3 spectrum at 2155-2175 MHz. Specifically this Public Notice requests information on proposed band plans that could increase opportunities for successful use of 2 GHz spectrum for terrestrial mobile broadband including three possible 2 GHz terrestrial spectrum concepts illustrated in the Appendix to the Public Notice.

INTRODUCTION

The challenge to find spectrum resources to meet the needs for expanded broadband capacity is particularly acute in the near term because the Commission has relatively little auctionable spectrum available in the pipeline to support expanded access to competitive mobile broadband services. Both the scope and the urgency of identifying additional spectrum for competitive mobile broadband services have been confirmed in the Commission's OBI Technical Paper No.6, "Mobile Broadband: The Benefits Of Additional Spectrum, (October 2010) which concluded that the "broadband spectrum deficit" is likely to approach 300 MHz by 2014.

Terrestrial deployment of mobile satellite spectrum ("MSS"), particularly 2 GHz MSS spectrum, as proposed in Recommendation 5.8.4 in the FCC's National Broadband Plan, is one of a number of spectrum initiatives intended to reach the FCC's goal of making available 300 MHz of spectrum for mobile broadband uses by 2015.

While we support the FCC's MSS initiative, it is critical that the Commission's analysis of possible configurations of 2 GHz MSS paired spectrum for terrestrial deployments not delay or diminish the FCC's initiatives to reallocate Federal spectrum in the 1755-1780 MHz band - *globally harmonized paired spectrum that would be compatible with existing AWS pairings.*

We agree with other commenters that the Commission's analysis of the possible terrestrial uses of the 2 GHz MSS paired band should be expanded to take account of (1) other possible combinations with reallocated Federal spectrum, (2) options created by relocation or relinquishment of MSS spectrum and (3) need to protect PCS operations in the 1930-1990 MHz band from interference caused by adjacent MSS uplink transmissions.

DISCUSSION

1. The FCC Should Continue its Consultations With NTIA to Examine Ways That Reallocation of Government Spectrum in a Portion of the 1755-1850 MHz Band Might be Feasible.

We continue to believe that the repurposing of Government 1755-1850 MHz bands is the most promising of the various NTIA proposals for reallocation of Federal spectrum.[1] We support continued dialogue between the Commission and NTIA to explore ways that reallocation of government spectrum in portions of the 1755-1850 MHz band might be feasible.

Specifically we support the pairing of 1755-1780 MHz with 2155-2180 MHz in conjunction with an expansion of 3GPP Band 10 specifications (i.e. through the addition of 10 MHz to each of its uplink and downlink blocks). This pairing permits infrastructure and device developers to leverage the extensive Band 10 work already completed by the wireless industry thereby diminishing time to market and development costs for infrastructure and devices. It also builds on the extensive experience and best practices developed in the prior relocation of federal uses in the 1710-1755 MHz band to facilitate relocation of similar uses in the 1755-1780 MHz band. Adoption of this proposal would also harmonize spectrum uses across multiple jurisdictions globally, enabling equipment vendors to achieve economies of scale resulting in reduced infrastructure and device costs for providers and end users.

The Commission, in consultation with NTIA, has made significant progress towards the reallocation of Federal spectrum in the 1755-1850 MHz band to pair with the AWS-3 band as

[1] USCC has previously filed Comments dated April 22, 2011 in ET Dkt No 10-123 supporting reallocation 1755-1780 MHz to be paired with 2155-2180 MHz in response to the Public Notice (DA 11-444) on wireless broadband deployment in the 1695-1710 MHz and 3550-3650 MHz bands and their related ongoing assessment of the 1755-1850 MHz, 4200-4220 MHz and 4380-4400 MHz bands, and others identified by NTIA as candidates for commercial use.

proposed in Recommendation 5.8.3 of the FCC's NBP. NTIA has now identified bands for Fast Track review and is conducting a detailed evaluation of the 1755-1850 MHz band to determine whether a portion or portions can be repurposed for commercial broadband use. In its April 1, 2011 Progress Report, NTIA indicates that it is still on track to complete its evaluation and recommendations for the possible reallocation of 1755-1850 MHz band spectrum by September 30, 2011.

We agree with AT&T, Ericsson, T-Mobile and Verizon Wireless that the Commission should not adopt any band plan for 2 GHz MSS spectrum which would affect the optimum pairing of the AWS-3 block and upper AWS-2 J block with reallocated Federal spectrum in the 1755-1780 MHz.[2] The Commission should wait until a decision is made on reallocation of spectrum above 1755 MHz before reaching any conclusions on the 2 GHz MSS spectrum that could result in the sub-optimization of the nation's scarce spectrum resources.

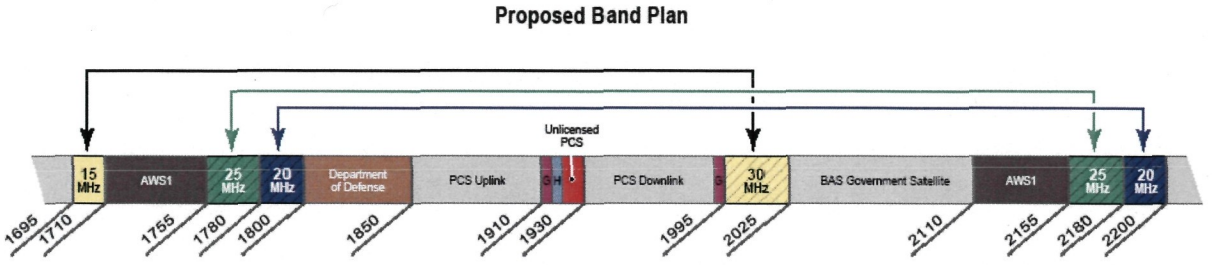
2. The FCC Should Expand its Evaluations to Include Alternative Band Plans that Integrate the 2 GHz MSS Spectrum with Existing and New AWS Allocations in Adjacent Bands.

We believe that the following spectrum proposals for repurposing MSS spectrum and expanding the AWS band plan submitted in comments in this proceeding have merit and deserve evaluation:

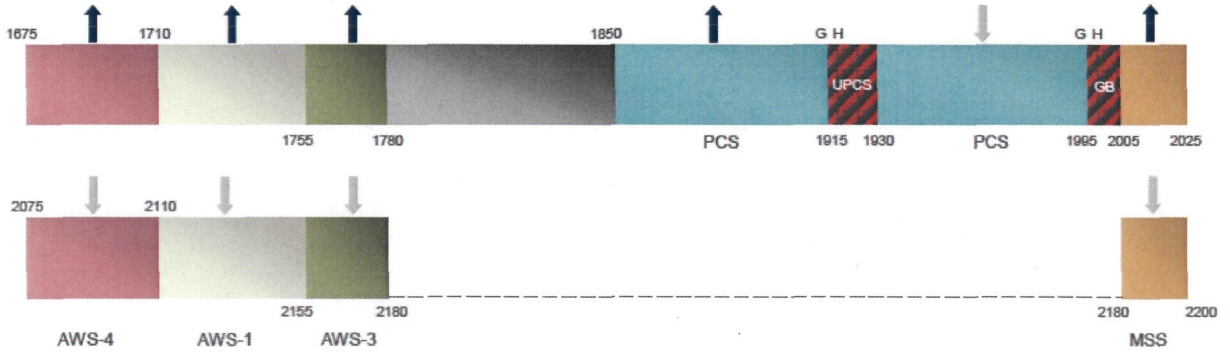
AT&T proposes " ... pairing of the 1695-1710 MHz band with the 1995-2025 MHz (upper H block, lower 2 GHz MSS, and lower J block) for an asymmetrical pairing that puts the lower portion of the 2 GHz MSS band to productive mobile broadband use while also remaining

[2] See Comments of AT&T, p. 5; Comments of Ericsson, p. 7.; Comments of T-Mobile, p. 6.; and Comments of Verizon Wireless p. 3.

consistent with the existing uplink/downlink configurations in neighboring bands."[3]



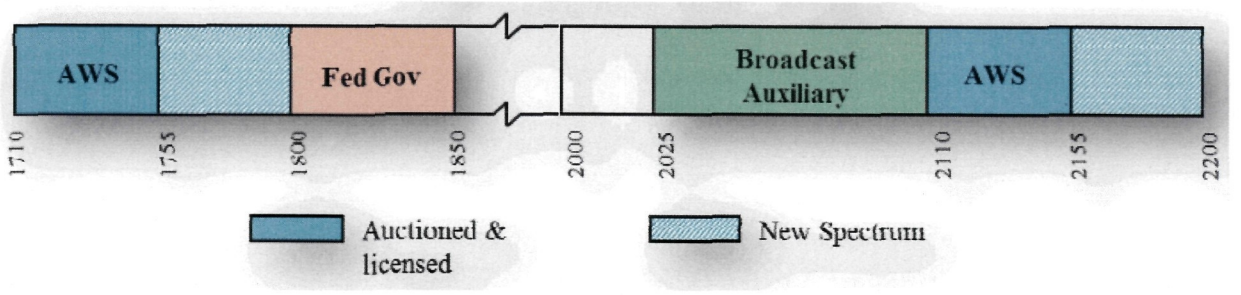
Ericsson advocates " ... the addition of licensed spectrum in the 1675-1710 MHz and 2075-2110 MHz bands to the AWS–1 ecosystem, which could be considered the AWS–4 band. The 2075-2110 portion of this proposed band is in the center of the 2 GHz band and should be examined as an important element of an alternative to the band plans in the Public Notice."[4]



Verizon Wireless suggests that " ... if the 1780-1800 MHz spectrum were reallocated, that spectrum could be paired with the 2180-2200 MHz portion of the MSS band to yield a total of 180 MHz of broadband spectrum that is fully compatible with existing spectrum uses and

[3] See Comments of AT&T, p. 7.
[4] See Comments of Ericsson, pp. 4-5. See also Comments of AT&T, p. 7.

globally harmonized."[5]



As the above proposals indicate, there appear to be significant opportunities for synergies among various spectrum blocks in terms of harmonizing allocations across multiple jurisdictions, enabling vendors to achieve economies of scale, accelerating equipment development and deployment and avoiding interference causing uplink/downlink adjacencies. We strongly encourage the Commission to evaluate how 2 GHz MSS might be voluntarily repurposed or how incentive auctions might be used to assist in transitioning MSS spectrum to capture its full value by integrating it with existing and new AWS pairings.

CONCLUSION

We support the Commission in its efforts to find new bands which can be reallocated and integrated with existing allocations to provide the 300 megahertz of new spectrum between 225 MHz and 3.7 GHz on or before 2015 (NBP Recommendation 5.8). We support continued review of possible pairings of 2 GHz MSS spectrum with suitable bands to create additional bandwidth for wireless broadband services to be licensed by auction selection. We also support continued FCC-NTIA consultation and analysis of the possible reallocation of the 1755-1850 MHz band. The Commission should take a holistic approach to band plan development incorporating creative alternatives to the band plan "concepts" identified in the Commission's Public Notice so

[5] See Comments of Verizon Wireless, p. 5.

that 2 GHz MSS spectrum can be repurposed as compatible extensions of the existing and new AWS bands.

Respectfully submitted,

UNITED STATES CELLULAR CORPORATION

By: Grant B. Spellmeyer PC

Grant B. Spellmeyer, Esq.
Executive Director - Federal Affairs
& Public Policy
United States Cellular Corporation
660 Pennsylvania Avenue, SE
Suite 201
Washington, DC 20003
Phone: 202-290-0233
Fax: 646-390-4280
Email: grant.spellmeyer@uscellular.com

UNITED STATES CELLULAR CORPORATION

By: George Y. Wheeler PC

George Y. Wheeler
Holland & Knight LLP
2099 Pennsylvania Avenue, NW
Suite 100
Washington, DC 20006-6801
Phone: 202-955-3000
Fax: 202-955-5564
E-mail: george.wheeler@hklaw.com

Its Attorneys

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